



LODI CITY COUNCIL

**Carnegie Forum
305 West Pine Street, Lodi**

"SHIRTSLEEVE" SESSION

Date: August 18, 2009

Time: 7:00 a.m.

For information regarding this Agenda please contact:

Randi Johl

City Clerk

Telephone: (209) 333-6702

***NOTE:** All staff reports or other written documentation relating to each item of business referred to on the agenda are on file in the Office of the City Clerk, located at 221 W. Pine Street, Lodi, and are available for public inspection. If requested, the agenda shall be made available in appropriate alternative formats to persons with a disability, as required by Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132), and the federal rules and regulations adopted in implementation thereof. To make a request for disability-related modification or accommodation contact the City Clerk's Office as soon as possible and at least 24 hours prior to the meeting date.*

Informal Informational Meeting

A. Roll Call by City Clerk

B. Topic(s)

B-1 Electric Utility Presentation on Solar Photovoltaic Technology (EUD)

C. Comments by Public on Non-Agenda Items

D. Adjournment

Pursuant to Section 54954.2(a) of the Government Code of the State of California, this agenda was posted at least 72 hours in advance of the scheduled meeting at a public place freely accessible to the public 24 hours a day.

Randi Johl
City Clerk



CITY OF LODI COUNCIL COMMUNICATION

AGENDA TITLE: Electric Utility Presentation on Solar Photovoltaic Technology (EUD)

MEETING DATE: August 18, 2009

PREPARED BY: Electric Utility Director

RECOMMENDED ACTION: Receive presentation by the Electric Utility Director regarding the status of solar photovoltaic technology and the potential for demonstrating such technology at a City-owned facility.

BACKGROUND INFORMATION: Significant world-wide progress has been made over the last five years toward making solar energy resources a viable electric utility scale resource technology.

Solar photovoltaic technology is one which uses silicon semiconductor material to produce electricity. Typically, two types of silicon (P type and N type) are sandwiched together in a flat plate solar panel creating a collector that is sensitive to sunlight. When light (photons) strikes a solar panel, electrons are displaced from the silicon atoms and flow if the panel is part of a closed circuit. The flowing electrons create a direct "DC" electrical current. The DC current is transformed into alternating current "AC" through use of an inverter.

Photovoltaic cells are most often mounted at an angle and face south in order to capture the maximum amount of direct sun. To increase output (at a higher installed cost), solar cells can also be placed on tracking systems that follow the sun to maximize the amount of solar energy captured. Another type of solar array is one designed to concentrate sunlight. These concentrating collectors use a lens or a glass reflecting surface to concentrate more sunlight onto the silicon cells.

Staff is proposing that the City solicit proposals for the installation, operation and maintenance of a relatively large scale solar project at its White Slough Water Treatment Control Facility (see attached map). Some of the benefits of such a project include:

- Showcasing a renewable energy project at a site adjacent to and visible from Interstate 5;
- Obtaining experience with solar energy technology;
- Exploring the economics of solar energy systems available today;
- Helping to demonstrate innovative renewable energy technologies and promoting eventual product commercialization and enhanced economics; and
- Enhance Lodi's reputation as a community welcoming new green businesses.

Staff feels the Council may particularly be interested in the field of green jobs and green manufacturing. The Governor has stated on a number of occasions that green jobs will be a significant source on new employment. We have an interest in increasing our visibility as a community open to green jobs. A viable solar project will help in this regard.

APPROVED: _____
Blair King, City Manager

Further background on solar photovoltaic technology and its potential demonstration at a City-owned facility will be provided at the meeting.

George F. Morrow
Electric Utility Director



PROPOSED SOLAR PROJECT SITE WHITE SLOUGH WATER POLLUTION CONTROL PLANT